

## PCPI eSpecification

<b>Clinical Topic</b>	<b>Adult Kidney Disease</b>
<b>Measure Title</b>	<b>Peritoneal Dialysis Adequacy: Solute</b>
<b>Measure #</b>	<b>AKID-11</b>
<b>Measure Description</b>	Percentage of patients aged 18 years and older with a diagnosis of ESRD receiving peritoneal dialysis who have a total Kt/V $\geq 1.7$ per week measured once every 4 months
<b>Measurement Period</b>	Twelve consecutive months
<b>Initial Patient Population</b>	Patient Age: Patient aged 18 years and older starts before the start of the measurement period Diagnosis Active: Patient has a diagnosis of ESRD starts before or during the measurement period Procedure Performed: Patient receiving peritoneal dialysis during the measurement period
<b>Denominator Statement</b>	All patients aged 18 years and older with a diagnosis of ESRD receiving peritoneal dialysis
<b>Numerator Statement</b>	Patients who have a total Kt/V $\geq 1.7$ per week measured once every 4 months Definition: Total Kt/V includes residual kidney function and equals peritoneal dialysate Kt/V plus renal Kt/V
<b>Denominator Exceptions</b>	None

**Adult Kidney Disease  
Data Elements for PCPI eSpecification**

**Measure #11 : Peritoneal Dialysis Adequacy: Solute**

QDM* Standard Category	QDM* Data Type	Standard Terminology	Constraints	Value Set Name	Value of Data Element	Data Source	Comments/Rationale
Measure Timing	N/A	N/A	TBD by measure implementer	Measurement Start Date			
Measure Timing	N/A	N/A	12 months from Measurement Start Date	Measurement End Date			
Individual Characteristic	Patient Characteristic	TBD	during measurement period	Gender		• Electronic Health Record (EHR)	This data element is collected for the purpose of stratifying results in an effort to highlight disparities.
Individual Characteristic	Patient Characteristic	TBD	during measurement period	Race		• Electronic Health Record (EHR)	This data element is collected for the purpose of stratifying results in an effort to highlight disparities.
Individual Characteristic	Patient Characteristic	TBD	during measurement period	Ethnicity		• Electronic Health Record (EHR)	This data element is collected for the purpose of stratifying results in an effort to highlight disparities.
Individual Characteristic	Patient Characteristic	TBD	during measurement period	Preferred Language		• Electronic Health Record (EHR)	This data element is collected for the purpose of stratifying results in an effort to highlight disparities.
Individual Characteristic	Patient Characteristic	LN	starts before the start of measurement period	Birth Date		• Electronic Health Record (EHR)	
Individual Characteristic	Patient Characteristic	Calculated	starts before the start of measurement period	Age	≥ 18	• Electronic Health Record (EHR)	Measurement start date minus Date of Birth must be greater than or equal to 18 years.
Condition / Diagnosis / Problem	Diagnosis, Active	I9, I10, SNM	starts before or during measurement period	End Stage Renal Disease (ESRD)		• Electronic Health Record (EHR)	
Procedure	Procedure, Performed	CPT	starts before or during measurement period	Peritoneal Dialysis - Adult		• Electronic Health Record (EHR)	
Encounter	Encounter, Performed	I9, I10	starts before or during measurement period	Peritoneal Dialysis - Encounter		• Electronic Health Record (EHR)	
Procedure	Procedure, Performed	SNM	starts before or during measurement period	Peritoneal Dialysis		• Electronic Health Record (EHR)	
Laboratory Test	Laboratory Test, Result	SNM	occurs three times during measurement period, each occurrence 4 months apart	Total Kt/V	≥ 1.7	• Electronic Health Record (EHR)	Total Kt/V includes residual kidney function and equals peritoneal dialysate Kt/V plus renal Kt/V.  Requires at least one measurement during the 4 month window. If more than one measurement present during 4 month window, use last (most recent) measurement.
No Valid Exceptions							

\*The Quality Data Model (QDM), Version 2.1, was developed by National Quality Forum (NQF).

## PCPI eSpecification

### Measure Logic for Adult Kidney Disease : Peritoneal Dialysis Adequacy: Solute

**Measure Description:** Percentage of patients aged 18 years and older with a diagnosis of ESRD receiving peritoneal dialysis who have a total Kt/V  $\geq 1.7$  per week measured once every 4 months

**Period:** 12 Consecutive Months

**PCPI Measure #: AKID-11**

Identify Patients in Initial Patient Population (IPP)	Identify Patients in Denominator (D)	Identify Patients in Numerator (N)	Identify Patients who have valid Denominator Exceptions * (E)
<div style="text-align: center;"> <div>PATIENT CHARACTERISTIC <sup>1</sup></div> <div>Patient Age 18 and older</div> </div> <div style="text-align: center;">And</div> <div style="text-align: center;"> <div>DIAGNOSIS Active <sup>2</sup></div> <div>End Stage Renal Disease (ESRD) Value Set 000287</div> </div> <div style="text-align: center;">And</div> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <div>PROCEDURE Performed <sup>3</sup></div> <div>Peritoneal Dialysis - Adult Value Set 000295</div> </div> <div style="text-align: center;">OR</div> <div style="text-align: center;"> <div>PROCEDURE Performed <sup>5</sup></div> <div>Peritoneal Dialysis Value Set 000297</div> </div> </div> <div style="text-align: center;">And</div> <div style="text-align: center;"> <div>ENCOUNTER Performed <sup>4</sup></div> <div>Peritoneal Dialysis - Encounter Value Set 000296</div> </div>	<div style="text-align: center;"> <div>All Patients Identified within the Initial Patient Population</div> </div>	<div style="text-align: center;"> <div>All Patients Identified within the Denominator</div> </div> <div style="text-align: center;">And</div> <div style="text-align: center;"> <div>LABORATORY TEST Result <sup>6</sup></div> <div>Total Kt/V <math>\geq 1.7</math> Value Set 000336</div> </div>	<div style="text-align: center;"> <div>No valid denominator exceptions for this measure</div> </div>

PARAMETER SPECIFICATIONS (Value Sets are found in the Coding Appendices):

IPP: <sup>1</sup> Patient Characteristic: measurement start date minus birth date (value set 000307)  $\geq 18$  years starts before the start of measurement period; <sup>2</sup> Diagnosis, Active: starts before or during measurement period; <sup>3</sup> Procedure, Performed: starts before or during measurement period; <sup>4</sup> Encounter, Performed: starts before or during measurement period; <sup>5</sup> Procedure, Performed: starts before or during measurement period;

N: <sup>6</sup> Laboratory Test, Result: last (most recent) result  $\geq 1.7$  - occurs three times during measurement period, each occurrence 4 months apart;

\*Coded examples are NOT intended to be an exhaustive list. Exceptions will vary for each patient and situation.

**Basic Measure Calculation:**

$$\frac{(N)}{(D) - (E)} = \%$$

The PCPI strongly recommends that exception rates also be computed and reported alongside performance rates as follows:

**Exception Calculation:**

$$\frac{(E)}{(D)} = \%$$

**Exception Types:**

E= E1 (Medical Exceptions) + E2 (Patient Exceptions) + E3 (System Exceptions)

**For patients who have more than one valid exception, only one exception should be counted when calculating the exception rate**

<p><b>Initial Patient Population (IPP)</b></p> <p><b>Definition:</b> The initial patient population identifies the general group of patients that the performance measure is designed to address; usually focused on a specific clinical condition (e.g., coronary artery disease, asthma). For example, a patient aged 18 years and older with a diagnosis of CAD who has at least 2 Visits during the measurement period.</p>	<p><b>Denominator (D)</b></p> <p><b>Definition:</b> The denominator defines the specific group of patients for inclusion in a specific performance measure based on specific criteria (e.g., patient's age, diagnosis, prior MI). In some cases, the denominator may be identical to the initial patient population.</p>	<p><b>Numerator (N)</b></p> <p><b>Definition:</b> The numerator defines the group of patients in the denominator for whom a process or outcome of care occurs (e.g., flu vaccine received).</p>	<p><b>Denominator Exceptions (E)</b></p> <p><b>Definition:</b> Denominator exceptions are the valid reasons why patients who are included in the denominator population did not receive a process or outcome of care (described in the numerator). Patients may have Denominator Exceptions for medical reasons (e.g., patient has an egg allergy so they did not receive flu vaccine); patient reasons (e.g., patient declined flu vaccine); or system reasons (e.g., patient did not receive flu Vaccine due to vaccine shortage). These cases are removed from the denominator population for the performance calculation, however the number of patients with valid exceptions should be calculated and reported. This group of patients constitutes the Denominator Exception reporting population – patients for whom the numerator was not achieved and there is a valid Denominator Exception.</p>
<p>Find the patients who meet the Initial Patient Population criteria (IPP)</p>	<p>Find the patients who qualify for the denominator (D):</p> <ul style="list-style-type: none"> <li>○ From the patients within the Patient Population criteria (IPP) select those people who meet Denominator selection criteria.</li> </ul> <p>(In some cases the IPP and D are identical).</p>	<p>Find the patients who qualify for the Numerator (N):</p> <ul style="list-style-type: none"> <li>○ From the patients within the Denominator (D) criteria, select those people who meet Numerator selection criteria.</li> <li>○ Validate that the number of patients in the numerator is less than or equal to the number of patients in the denominator</li> </ul>	<p>From the patients who did not meet the Numerator criteria, determine if the patient meets any criteria for the Denominator Exception (E1 + E2+E3). If they meet any criteria, they should be removed from the Denominator for performance calculation. As a point of reference, these cases are removed from the denominator population for the performance calculation, however the number of patients with valid exceptions should be calculated and reported.</p>

**ADULT KIDNEY DISEASE**  
**Coding Spreadsheet for PCPI eSpecification**  
**AKID-11 : Peritoneal Dialysis Adequacy : Solute**

Value Set ID	Clinical Topic	Topic Indicator	Measure Component	Standard Concept	Standard Category	Taxonomy	Code	Code Descriptor
000307	AKID	11	IPP	Birth Date	Individual Characteristic	LN	21112-8	Birth date: TmStp:Pt:APatient:Qn:
000287	AKID	11	IPP	End Stage Renal Disease (ESRD)	Condition / Diagnosis / Problem	I9	585.6	End Stage Renal Disease [Chronic Kidney Disease, Stage V (requiring chronic dialysis)]
000287	AKID	11	IPP	End Stage Renal Disease (ESRD)	Condition / Diagnosis / Problem	I10	N18.6	End Stage Renal Disease (chronic kidney disease requiring chronic dialysis)
000287	AKID	11	IPP	End Stage Renal Disease (ESRD)	Condition / Diagnosis / Problem	SNM	46177005	end stage renal disease
000287	AKID	11	IPP	End Stage Renal Disease (ESRD)	Condition / Diagnosis / Problem	SNM	236435004	end stage renal failure on dialysis
000295	AKID	11	IPP	Peritoneal Dialysis - Adult	Procedure	CPT	90945	
000295	AKID	11	IPP	Peritoneal Dialysis - Adult	Procedure	CPT	90947	
000295	AKID	11	IPP	Peritoneal Dialysis - Adult	Procedure	CPT	90957	
000295	AKID	11	IPP	Peritoneal Dialysis - Adult	Procedure	CPT	90958	
000295	AKID	11	IPP	Peritoneal Dialysis - Adult	Procedure	CPT	90959	
000295	AKID	11	IPP	Peritoneal Dialysis - Adult	Procedure	CPT	90960	
000295	AKID	11	IPP	Peritoneal Dialysis - Adult	Procedure	CPT	90961	
000295	AKID	11	IPP	Peritoneal Dialysis - Adult	Procedure	CPT	90962	
000295	AKID	11	IPP	Peritoneal Dialysis - Adult	Procedure	CPT	90965	
000295	AKID	11	IPP	Peritoneal Dialysis - Adult	Procedure	CPT	90966	
000295	AKID	11	IPP	Peritoneal Dialysis - Adult	Procedure	CPT	90969	
000295	AKID	11	IPP	Peritoneal Dialysis - Adult	Procedure	CPT	90970	
000296	AKID	11	IPP	Peritoneal Dialysis - Encounter	Encounter	I9	V56.2	Fitting and adjustment of peritoneal dialysis catheter
000296	AKID	11	IPP	Peritoneal Dialysis - Encounter	Encounter	I9	V56.32	Encounter for adequacy testing for peritoneal dialysis
000296	AKID	11	IPP	Peritoneal Dialysis - Encounter	Encounter	I9	V56.8	Other dialysis (Peritoneal Dialysis)
000296	AKID	11	IPP	Peritoneal Dialysis - Encounter	Encounter	I10	Z49.02	Encounter for fitting and adjustment of peritoneal dialysis catheter
000296	AKID	11	IPP	Peritoneal Dialysis - Encounter	Encounter	I10	Z49.32	Encounter for adequacy testing for peritoneal dialysis
000297	AKID	11	IPP	Peritoneal Dialysis	Procedure	SNM	71192002	peritoneal dialysis
000297	AKID	11	IPP	Peritoneal Dialysis	Procedure	SNM	428648006	automated peritoneal dialysis
000297	AKID	11	IPP	Peritoneal Dialysis	Procedure	SNM	225230008	chronic peritoneal dialysis
000297	AKID	11	IPP	Peritoneal Dialysis	Procedure	SNM	238318009	continuous ambulatory peritoneal dialysis
000297	AKID	11	IPP	Peritoneal Dialysis	Procedure	SNM	238319001	continuous cycling peritoneal dialysis
000297	AKID	11	IPP	Peritoneal Dialysis	Procedure	SNM	238321006	intermittent peritoneal dialysis
000297	AKID	11	IPP	Peritoneal Dialysis	Procedure	SNM	238323009	night-time intermittent peritoneal dialysis
000297	AKID	11	IPP	Peritoneal Dialysis	Procedure	SNM	14684005	peritoneal dialysis excluding cannulation
000297	AKID	11	IPP	Peritoneal Dialysis	Procedure	SNM	676002	peritoneal dialysis including cannulation
000297	AKID	11	IPP	Peritoneal Dialysis	Procedure	SNM	238322004	tidal peritoneal dialysis
000336	AKID	11	N	Total Kt/V	Laboratory Test	SNM	10189951000046109	Total kt/V
000336	AKID	11	N	Total Kt/V	Laboratory Test	SNM	375196010	kt/V
000336	AKID	11	N	Total Kt/V	Laboratory Test	SNM	375202013	kt/V - iteration
000336	AKID	11	N	Total Kt/V	Laboratory Test	SNM	375203015	kt/V - log ratio